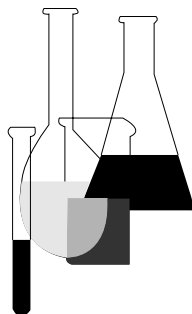




Product Performance Test Guidelines

OPPTS 810.3100 Soil Treatments for Imported Fire Ants



INTRODUCTION

This guideline is one of a series of test guidelines that have been developed by the Office of Prevention, Pesticides and Toxic Substances, United States Environmental Protection Agency for use in the testing of pesticides and toxic substances, and the development of test data that must be submitted to the Agency for review under Federal regulations.

The Office of Prevention, Pesticides and Toxic Substances (OPPTS) has developed this guideline through a process of harmonization that blended the testing guidance and requirements that existed in the Office of Pollution Prevention and Toxics (OPPT) and appeared in Title 40, Chapter I, Subchapter R of the Code of Federal Regulations (CFR), the Office of Pesticide Programs (OPP) which appeared in publications of the National Technical Information Service (NTIS) and the guidelines published by the Organization for Economic Cooperation and Development (OECD).

The purpose of harmonizing these guidelines into a single set of OPPTS guidelines is to minimize variations among the testing procedures that must be performed to meet the data requirements of the U. S. Environmental Protection Agency under the Toxic Substances Control Act (15 U.S.C. 2601) and the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136, *et seq.*).

Final Guideline Release: This guideline is available from the U.S. Government Printing Office, Washington, DC 20402 on *The Federal Bulletin Board*. By modem dial 202-512-1387, telnet and ftp: fedbbs.access.gpo.gov (IP 162.140.64.19), or call 202-512-0132 for disks or paper copies. This guideline is also available electronically in ASCII and PDF (portable document format) from EPA's World Wide Web site (<http://www.epa.gov/epahome/research.htm>) under the heading "Researchers and Scientists/Test Methods and Guidelines/OPPTS Harmonized Test Guidelines."

OPPTS 810.3100 Soil treatments for imported fire ants.

(a) **Scope**—(1) **Applicability.** This guideline is intended to meet testing requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136, *et seq.*)

(2) **Background.** The source material used in developing this harmonized OPPTS test guideline is OPP guideline 95-3 General Soil Treatments (Pesticide Assessment Guidelines, Subdivision G: Product Performance, EPA report 540/9-82-026, October 1982).

(b) **Overview.** This guideline is concerned with efficacy testing of invertebrate control pesticides used for control of imported fire ants.

(c) **General considerations.** The testing of pesticide products for use in home gardens should follow the same procedures as are appropriate for evaluating their commercial use.

(d) **Evaluation and reporting procedures.** The procedures used to evaluate product performance should be specified. Reports should include insect counts, percent damage, or other measures for determining the effectiveness of the test product. Results should include the average infestation reduction throughout the sampled post-treatment period compared with that in control plots or in pre- and post-treatment periods. Raw data on pest counts, injury counts, or other measures of control should be summarized. Any adverse effects such as phytotoxicity should be reported.

(e) **Site selection.** Sites should be selected from several states within the range of the imported fire ant. Usually, three such sites are necessary to provide information in the data derived.

(f) **Plot size**—(1) **Mound application.** In general, use a minimum of 10 mounds per plot. Usually, 3 to 4 plots are treated with the candidate compound and 1 plot is used as a control.

(2) **Broadcast treatments.** Plots should be of sufficient size to permit the use of the application equipment specified on the label. Replication may be difficult when very large plots are necessary, but is encouraged to develop statistically valid data.

(g) **Suggested performance standards.** Unless otherwise specified, these standards are presented on the basis of pre- and post-treatment pest population counts from the treated as well as the untreated lots and standard comparative treatments. All percentages of control refer to the performance of the test substance (as determined by insect counts and other measures correlated to insect population pressures) against the vulnerable stage(s) of the target pest, when evaluated according to a recognized treatment program under actual field conditions.

(1) **Control claims.** A minimum of 90% control based on counts made for a minimum of 30 days for mound applications and 60 days for

broadcast treatments. Percent control is based on the percent reduction in both old and new active mounds in the treatment area as compared to precounts and untreated controls.

(2) **Suppression claims.** Broadcast treatments only. A minimum of 80% control based on counts made for a minimum of 60 days and based upon the adjusted percentage of reduction of the total number of old and new active mounds in the treatment area and untreated controls. A lower percentage of control may be acceptable if testing was done under adverse conditions, but in no case would less than 70% control be acceptable.